UNITED TECHNOLOGIES PRATT&WHITNEY

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May 22, 1989

Mr. George Dews
Senior Environmental Engineer
Hazardous Waste Management Section
Department of Environmental Protection
165 Capitol Avenue
Hartford, CT 06106

Mr. Stephen Yee
Environmental Engineer
Waste Management Division
US EPA
JFK Federal Building
Room 1903
Boston, MA 02203

RE: Response to Comments on the Burn-Zol Hazardous Waste Incinerator Closure Plan dated April 27, 1989.

Dear Sirs:

Pratt & Whitney is pleased to submit the following response to agency comments on the most recent submittal of the Burn-Zol Hazardous Waste Incinerator Closure Plan dated May 2, 1988. This response was requested during a telephone conversation on May 12, 1989 between Mr. Stephen Yee and Mr. Scott L. Singer from Pratt & Whitney.

It is understood that this letter is intended to function as an outline in preparation for a meeting to be held on May 25, 1989 at EPA Region 1 Headquarters regarding the next round of closure plan modifications. The following is our response to individual comments in preparation for the meeting:

Comment Number

1. In section 1.0, INTRODUCTION

   a. The degree of response to this comment is subject to interpretation. The contractor retained to perform closure activities will follow all necessary health and safety requirements as well as protect the environment. We will be glad to expand this description in the introduction; however, the specific items can be better defined at the meeting.

   b. Will be incorporated as read.

   c. Will be incorporated as read.

   d. This is similar to comment 1.a. Potential scenarios can be described at the meeting.

e.

1. "decontamination process" will be changed to "closure activities"

2. The potential for fire/explosion is very low. We will not refer to a fire potential in the next submittal.

3. The second sentence will be changed to read: " In the event of an unplanned release of hazardous waste, emergency response procedures outlined in Pratt & Whitney's combined SPCC & Contingency Plan will be activated."

f. The paragraph will be omitted. This information will be described in the transmittal letter.

2. In section 2.0, FACILITY DESCRIPTION

a. The first sentence will be rewritten to read: " During the allowed test burns to determine operating parameters, the incinerator never met Connecticut Department of Environmental Protection performance criteria for particulate emissions. The incinerator has not operated since the last test burn dated May 30,1984."

3. In section 3.0, INCINERATOR DESCRIPTION

a. The definition of "incinerator train" will read as follows: "The incinerator train encompasses the entire incineration process from the initial liquid waste injection ports to and including the exhaust stacks. Specific incinerator train components include: the waste injection nozzles, the primary and secondary combustion chambers, the lined flue piping, the waste heat boiler, the unlined flue piping, and the air pollution control equipment."

b. Appendix A will be corrected to read 21' 3".

c.

1. The word "also " will be omitted as requested.

2. A plan sketch will be prepared and included as an Appendix. This sketch will depict what portions of the incinerator train are inside and outside the building. In addition, a verbal description will be included in Section 3.0

d. "B&G" will be eliminated from the third sentence in paragraph 6.

e.

1. The first word will be capitalized as requested.

2. Wipe sampling has been proposed in Section 8.0 Step 6. We would like to discuss the nature and extent of sampling at the meeting.

4. In section 5.0, TEST BURN HISTORY

a. This section will be rewritten as requested.

b. Will be revised as requested.

5. In section 6.0, CLOSURE PROCEDURES AND SCHEDULE

a.

1. Will be revised as requested.

2. The present closure alternative we are pursuing is to dispose of all portions of the incinerator train; therefore, no portions of the incinerator train will remain.

3. As mentioned in response 5.a.2. above, the present plan is to dispose of all portions of the incinerator train; therefore, there is no need to discuss present and future uses. Please refer to response 8.d. & f. regarding the decontamination of the concrete pad and concrete pit containing the air pollution control equipment.

4. The second sentence will read: "The building structure housing a portion of the incinerator train is currently used for other hazardous waste activities. At present, these activities are limited to drum storage and bulk wax/solvent storage. Upon completion of the incinerator closure activities, the building will continue to be used for hazardous waste activities."

5. We have not defined the exact post closure usage of the structure that will remain following the incinerator closure activities. We request that the timeframe set forth in section 6.0 subparagraph 6 remain at 120 days following the Certification of Closure.

b. The first sentence will read: "At closure, all hazardous wastes, including ash, will be removed from the incinerator train."

c. This comment appears to refer to paragraph 4. "... during the closure." will be changed to " ... during closure activities.".

d.

1. Will be revised as requested.

2.

a. The amount of ash visually observed in the bottom of the primary chamber is less than one cubic meter. Reference to an "appropriate and similar tool" refers to a hand trowel.

b. We will be glad to expand the discussion regarding the decontamination of protective clothing and tools in the next closure plan submittal; however, we suggest discussing this issue at the meeting to determine the extent and scope of the written description.

3.

a. The appropriate solvent used to flush the cyanide waste feed lines will be a dilute sodium hydroxide solution.

The appropriate solvent used to flush the blend oil line and wax/solvent line will be virgin jet fuel.

b. Subparagraph 2. of Section 6.0 will be changed to read:

"The waste feed lines and injection nozzles will be flushed from the pumps located in the basement of the drum storage building.

The cyanide feed line will be flushed using a three step rinsing process. The first rinse will consist of ordinary plant process water. This will be followed by a dilute sodium hydroxide solution rinse. Finally, the line will be flushed again using ordinary plant process water. Any rinsate determined to be a hazardous waste will be treated, stored, and disposed of accordingly. The rinsate from the third rinse will be collected and tested to determine if it is a hazardous waste following the procedures and parameters detailed in Sections 9.0 and 10.0. If the second plant process water rinse is found to be hazardous then the three step rinsing procedure will be repeated until the plant process water rinse is determined to be non-hazardous. The cyanide feed line will then be cut off at ground level, sealed, and abandoned in place."

The only other lines which were installed underground are two blended oil/zyglo lines. We are currently investigating recent reports indicating that these lines were never used during any of the test burns.

c. See response 5.d.3.b. above.

d. See response 5.d.3.b. above.

e. A more detailed description of the waste feed lines will be presented in section 3.0 INCINERATOR DESCRIPTION. In addition, the historical usage of the lines will be clarified in section 5.0 TEST BURN HISTORY.

f. See response 5.d.3.b. above.

g. See response 5.d.3.b. above.

4.

a. Subparagraph 3. will be rewritten as follows: "Disassemble the incinerator train into manageable size pieces. Place disassembled pieces into a polyethylene lined dump trailer and manifest and transport to a fully permitted facility for disposal. Any incinerator ash encountered during the dismantling operations will be wetted for dust control, collected and stored in the appropriate container, and disposed of accordingly.

b. We will be glad to provide more information on the overall means and methods of incinerator closure including incinerator train, dismantling, steam cleaning and sandblasting operations and the types of protective clothing to be used. However, these items will best be described following the receipt of more detailed proposals from the firms that specialize in this type of work. We suggest discussing this issue at the meeting to determine the extent of the written description.

c. See response 5.d.4.a. above.

d. A transporter has not been identified at this time. It is anticipated that the decontamination and dismantling contractor will coordinate the transportation requirements.

e. We have not identified a disposal facility at this time. Due to the everchanging nature of disposal alternatives it is unrealistic to define the final disposal site in the closure plan until all disposal alternatives are examined.

f. See response 5.d.4.b. above.

5.

a. See response 5.d.4.b. above.

b. See response 5.d.4.b. above.

c. We do not believe that there are any other areas besides the concrete pad, the concrete pit and the incinerator train itself that were exposed to incineration operations.

d. The word "formerly" will be incorporated as requested.

6. Subparagraph 5 will be changed to read: "Complete the Certification of Closure as shown in Section 11.0. Within 60 days of completion of all closure activities, the certification of closure will be sent by registered mail to the EPA Regional Administrator and the Commissioner of the Connecticut Department of Environmental Protection.

7.

a. See response 5.a.5. above.

b. Will be incorporated as read.

c. Table 1 will be changed to reflect the timeframe in days.

d. The expected year of closure will be included in the first paragraph after Table 1.

8. The first paragraph after Table 1 will be changed to read: "It is expected that all closure activities will be completed in the year 1990. Closure activities may be completed ahead of the timetable outlined in Table 1; however, all closure activities described in this closure plan will be completed within 180 days after receiving final approval from EPA/DEP pursuant to 40 CFR Part 265.113(b)."

6. In section 7.0, MAXIMUM WASTE INVENTORY

a. Comment will be incorporated as read.

b. Will be included as requested.

c. What subparagraph does this comment refer to?

7. In section 8.0, CLOSURE COST ESTIMATE AND UPDATES:

a. The closure steps and related costs will be revised on pages 9 and 10 of the closure plan. In order to present updated closure costs representative of the current market conditions, we will need to obtain new contractor proposals reflecting this update. These proposals combined with the information gathered from EPA Guidance Manual: Cost Estimates for Closure and Post-Closure Plans, Volume 3 - Unit Costs. (EPA # 530-SW-87-009) will be used to provide accurate costs estimates for the outlined closure activities.

b. See response 7.a. above.

c. References to submissions will be omitted as requested.

d. See response 7.a. above.

8. In section 9.0, SAMPLING PROCEDURES

a. Reference will be made to using the third edition of SW-846.

b. Due to the nature of sampling techniques and matrices (ie. wipe samples), the quality control/quality assurance (QA/QC) program needs to be further defined. We would like to address this issue at the meeting.

c. Once the scope of the analytical program has been finalized, we can proceed with a new round of laboratory proposals and cost estimates. Decisions regarding the choice of the analytical laboratory should be deferred until this scope of the analytical program is defined.

d. As mentioned in Section 6.0 subparagraph 4. the concrete pad that formerly was used as the footing for the incinerator will be shotblasted and all residues from the shot blasting operations will be collected and disposed of as hazardous waste. Following the shotblasting operations there should be no areas that are visually stained; therefore, discrete sampling of the pad would not be appropriate. We would like to discuss the available alternatives for other sampling schemes for the concrete pad. Following the agreed upon strategy, we will develop additional cost estimates for sampling and disposal.

e. See response 3.e.2.

f. The present closure alternative we are pursuing is to dispose of all portions of the incinerator train. As mentioned in response number 5.d.5.c. above, the only areas that we believe were exposed to incineration operations were the concrete pad, the pit containing the air pollution control equipment, and the incinerator train. Therefore, the only contacted areas that will remain after closure activities will be the concrete pad and the concrete pit containing the air pollution control equipment.

The sampling of the concrete pad and the pit will determine the hazard/nonhazard condition of the remaining structure. Decontamination of the structures will continue until the agreed upon clean up levels are reached.

g. We would like to discuss the clean target levels at the meeting.

9. In section 10.0, TESTING AND DETERMINATION PROCEDURES:

a. The concrete pad , the concrete pit, the incinerator train, and any ash residue will be treated as hazardous waste unless sample analysis indicates a nonhazardous condition. In addition, the rinsate from the waste feed flushing operation will be treated as hazardous waste unless analytical results prove a nonhazardous condition.

b. We would like to discuss the appropriate sampling schemes and parameter lists at the meeting.

c. This error will be corrected on Table 3. We will refer to the third edition of SW-846 for the proper methods.

d. We will need to identify the appropriate laboratory prior to referencing a specific analytical method. See response 8.c. above.

e. The chosen laboratory will follow all necessary quality controls as specified in SW-846. See response 8.c. above.

f. See response 8.c. above.

10. In section 11.0, CERTIFICATION OF CLOSURE:

a. The first sentence of the first paragraph will be changed to read: "The certification statement presented below will be sent via registered mail to the EPA Regional Administrator and the CT DEP within 60 days of the completion of closure pursuant to 40 CFR Part 265.120.

11. We will provide photographs as requested.

We appreciate the opportunity to respond to your latest round of comments. If you have any questions regarding the above responses prior to the meeting, please contact Scott Singer at 203-565-2016.

Sincerely,

John G. Whitehead
Plant Manager

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